

**AMENDMENTS TO THE CLAIMS**

**Claim 1 (withdrawn):** A dietary supplement composition, comprising freeze-dried *Euterpe edulis* (Jucara) fruit pulp, wherein the composition:

- (a) comprises a total anthocyanin concentration greater than about 1 milligram per gram total weight;
- (b) has an ORAC<sub>FL</sub> value greater than about 350 micromole TE per gram total weight;
- and
- (c) has a residual water content less than about 3 weight percent of the total weight.

**Claim 2 (withdrawn):** A dietary supplement composition, comprising freeze-dried Jucara fruit pulp, wherein the composition:

- (a) has a cyclooxygenase inhibition value greater than about 15 Aspirin<sup>®</sup> mg equivalent per gram total weight; and
- (b) has a residual water content less than about 3 weight percent of the total weight.

**Claim 3 (withdrawn):** The composition of claim 1 or 2, wherein the dietary supplement composition further comprises a pharmaceutically acceptable carrier.

**Claim 4 (withdrawn):** A method of producing a stable and palatable Jucara-based dietary supplement composition, the method comprising the steps of

- (a) harvesting Jucara fruits;
- (b) weighing the Jucara fruits;
- (c) cleaning the Jucara fruits with water;
- (d) washing the Jucara fruits with water at a temperature of about 75 degrees C. to 100 degrees C. for a period of time of about 5 seconds to 10 minutes;
- (e) hulling the Jucara fruits to isolate a Jucara fruit pulp from the Jucara fruits;
- (f) freezing the Jucara fruit pulp to a temperature less than about -5 degrees C.; and
- (g) freeze-drying the Jucara fruit pulp under conditions to yield a granular, freeze-dried Jucara fruit pulp powder with a residual water content of less than 3 weight percent;

wherein the freeze-dried Jucara fruit pulp powder is more stable and palatable than an Jucara pulp preparation.

**Claim 5 (withdrawn):** The method of claim 4, wherein the cleaning step consists of cleaning the Jucara fruits with hygienic water at 0.1% (v/v).

**Claim 6 (withdrawn):** The method of claim 4, wherein the washing step consists of washing the Jucara fruits in water at a temperature of about 80 degrees C. for a period of time of about 10 seconds.

**Claim 7 (withdrawn):** The method of claim 4, wherein the hulling step consists of mechanically hulling the Jucara fruits for a time period of between about 2 minutes to 5 about minutes and the hulling step is carried out using about 1 liter of water per 2 kg of Jucara fruits.

**Claim 8 (withdrawn):** The method of claim 4, wherein the Jucara-based dietary supplement composition has an ORAC<sub>FL</sub> value of greater than about 350 micromole TE per gram total weight.

**Claim 9 (withdrawn):** The method of claim 4, wherein the Jucara-based dietary supplement composition has a cyclooxygenase inhibition value greater than about 15 Aspirin<sup>®</sup> mg equivalent per gram total weight.

**Claim 10 (withdrawn):** A method of preventing or treating a disease or an injury induced by pathological free radical reactions in a mammal, the method comprising administering to the mammal an effective amount of the Jucara-based dietary supplement composition of any one of claims 1-3, wherein the composition quenches free radicals and reduces the damage induced by pathological free radicals.

**Claim 11 (withdrawn):** The method of claim 10, wherein the disease or injury is selected from the group consisting of: cancer, colon cancer, breast cancer, inflammatory bowel disease, Crohn's disease, vascular disease, arthritis, ulcer, acute respiratory distress syndrome, ischemia-reperfusion injury, neurodegenerative disorders, autism, Parkinson's Disease, Alzheimer's

Disease, gastrointestinal disease, tissue injury induced by inflammation, and tissue injury induced by an environmental toxin.

**Claim 12 (withdrawn):** A method for alleviating the deleterious effects of pathological free radical reactions in a mammal afflicted with a disease or an injury induced by pathological free radical reactions in a mammal, the method comprising administering to the mammal an effective amount of the Jucara-based dietary supplement composition of any one of claims 1-3, wherein the composition quenches free radicals and reduces the damage induced by pathological free radicals.

**Claim 13 (withdrawn):** The method of claim 12, wherein the disease or injury is selected from the group consisting of: cancer, colon cancer, breast cancer, inflammatory bowel disease, Crohn's disease, vascular disease, arthritis, ulcer, acute respiratory distress syndrome, ischemia-reperfusion injury, neurodegenerative disorders, autism, Parkinson's Disease, Alzheimer's Disease, gastrointestinal disease, tissue injury induced by inflammation, and tissue injury induced by an environmental toxin.

**Claim 14 (withdrawn):** A method of inhibiting cyclooxygenase enzyme activity in a mammal, the method comprising administering to the mammal an effective amount of a composition comprising the Jucara-based dietary supplement composition of any one of claims 1-3.

**Claim 15 (withdrawn):** The method of claim 14, wherein the composition further comprises a pharmaceutically acceptable carrier.

**Claim 16 (withdrawn):** The method of claim 14, wherein the composition is administered by a route of administration selected from the group consisting of: oral, intravenous, intraperitoneal, subcutaneous, intramuscular, intraarticular, intraarterial, intracerebral, intracerebellar, intrabronchial, intrathecal, topical, and aerosol route.

**Claim 17 (withdrawn):** A method of preventing or treating a disease or an injury associated with increased cyclooxygenase enzyme activity in a mammal, the method comprising

administering to the mammal an effective amount of a composition comprising the Jucara-based dietary supplement composition of any one of claims 1-3.

**Claim 18 (withdrawn):** The method of claim 17, wherein the composition further comprises a pharmaceutically acceptable carrier.

**Claim 19 (withdrawn):** The method of claim 17, wherein the composition is administered by a route of administration selected from the group consisting of: oral, intravenous, intraperitoneal, subcutaneous, intramuscular, intraarticular, intraarterial, intracerebral, intracerebellar, intrabronchial, intrathecal, topical, and aerosol route.

**Claim 20 (withdrawn):** The method of claim 17, wherein the disease or injury is selected from the group consisting of: cancer, colon cancer, breast cancer, inflammatory bowel disease, Crohn's disease, vascular disease, arthritis, ulcer, acute respiratory distress syndrome, ischemia-reperfusion injury, neurodegenerative disorders, autism, Parkinson's Disease, Alzheimer's Disease, gastrointestinal disease, tissue injury induced by inflammation, and tissue injury induced by an environmental toxin.

**Claim 21 (original):** A dietary supplement composition, comprising freeze-dried *Euterpe oleracea* (Acai) fruit pulp, wherein the composition:

(a) comprises a total anthocyanin concentration greater than about 1 milligram per gram total weight;

(b) has an ORAC<sub>FL</sub> value greater than about 350 micromole TE per gram total weight; and

(c) has a residual water content less than about 3 weight percent of the total weight.

**Claim 22 (original):** A dietary supplement composition, comprising freeze-dried Acai fruit pulp, wherein the composition:

(a) has a cyclooxygenase inhibition value greater than about 15 Aspirin<sup>®</sup> mg equivalent per gram total weight; and

(b) has a residual water content less than about 3 weight percent of the total weight.

**Claim 23 (original):** The composition of any one of claim 21 or 22, wherein the dietary supplement composition further comprises a pharmaceutically acceptable carrier.

**Claim 24 (original):** A method of producing a stable and palatable Acai-based dietary supplement composition, the method comprising the steps of:

- (a) harvesting Acai fruits;
  - (b) weighing the Acai fruits;
  - (c) cleaning the Acai fruits with water;
  - (d) washing the Acai fruits with water at a temperature of about 75 degrees C. to 100 degrees. C. for a period of time of about 5 seconds to 10 minutes;
  - (e) hulling the Acai fruits to isolate a Acai fruit pulp from the Acai fruits;
  - (f) freezing the Acai fruit pulp to a temperature less than about -5 degrees C.; and
  - (g) freeze-drying the Acai fruit pulp under conditions to yield a granular, freeze-dried Acai fruit pulp powder with a residual water content of less than 3 weight percent;
- wherein the freeze-dried Acai fruit pulp powder is more stable and palatable than an Acai pulp preparation.

**Claim 25 (original):** The method of claim 24, wherein the cleaning step consists of cleaning the Acai fruits with hygienic water at 0.1% (v/v).

**Claim 26 (original):** The method of claim 24, wherein the washing step consists of washing the Acai fruits in water at a temperature of about 80 degrees C. for a period of time of about 10 seconds.

**Claim 27 (original):** The method of claim 24, wherein the hulling step consists of mechanically hulling the Acai fruits for a time period of between about 2 minutes to 5 about minutes and the hulling step is carried out using about 1 liter of water per 2 kg of Acai fruits.

**Claim 28 (original):** The method of claim 24, wherein the Acai-based dietary supplement composition has an ORAC<sub>FL</sub> value of greater than about 350 micromole TE per gram total weight.

**Claim 29 (original):** The method of claim 24, wherein the Acai-based dietary supplement composition has a cyclooxygenase inhibition value greater than about 15 Aspirin<sup>®</sup> mg equivalent per gram total weight.

**Claim 30 (currently amended):** A method of ~~preventing or~~-treating a disease or an injury induced by pathological free radical reactions in a mammal, the method comprising administering to the mammal an effective amount of the Acai-based dietary supplement composition of any one of claims 21-23, wherein the composition quenches free radicals and reduces the damage induced by pathological free radicals.

**Claim 31 (original):** The method of claim 30, wherein the disease or injury is selected from the group consisting of: cancer, colon cancer, breast cancer, inflammatory bowel disease, Crohn's disease, vascular disease, arthritis, ulcer, acute respiratory distress syndrome, ischemia-reperfusion injury, neurodegenerative disorders, autism, Parkinson's Disease, Alzheimer's Disease, gastrointestinal disease, tissue injury induced by inflammation, and tissue injury induced by an environmental toxin.

**Claim 32 (original):** A method for alleviating the deleterious effects of pathological free radical reactions in a mammal afflicted with a disease or an injury induced by pathological free radical reactions in a mammal, the method comprising administering to the mammal an effective amount of the Acai-based dietary supplement composition of any one of claims 21-23, wherein the composition quenches free radicals and reduces the damage induced by pathological free radicals.

**Claim 33 (original):** The method of claim 32, wherein the disease or injury is selected from the group consisting of cancer, colon cancer, breast cancer, inflammatory bowel disease, Crohn's disease, vascular disease, arthritis, ulcer, acute respiratory distress syndrome, ischemia-reperfusion injury, neurodegenerative disorders, autism, Parkinson's Disease, Alzheimer's Disease, gastrointestinal disease, tissue injury induced by inflammation, and tissue injury induced by an environmental toxin.

**Claim 34 (withdrawn):** A method of inhibiting cyclooxygenase enzyme activity in a mammal, the method comprising administering to the mammal an effective amount of a composition comprising the Acai-based dietary supplement composition of any one of claims 21-23.

**Claim 35 (withdrawn):** The method of claim 34, wherein the composition further comprises a pharmaceutically acceptable carrier.

**Claim 36 (withdrawn):** The method of claim 34, wherein the composition is administered by a route of administration selected from the group consisting of: oral, intravenous, intraperitoneal, subcutaneous, intramuscular, intraarticular, intraarterial, intracerebral, intracerebellar, intrabronchial, intrathecal, topical, and aerosol route.

**Claim 37 (withdrawn):** A method of preventing or treating a disease or an injury associated with increased cyclooxygenase enzyme activity in a mammal, the method comprising administering to the mammal an effective amount of a composition comprising the Acai-based dietary supplement composition of any one of claims 21-23.

**Claim 38 (withdrawn):** The method of claim 37, wherein the composition further comprises a pharmaceutically acceptable carrier.

**Claim 39 (withdrawn):** The method of claim 37, wherein the composition is administered by a route of administration selected from the group consisting of: oral, intravenous, intraperitoneal, subcutaneous, intramuscular, intraarticular, intraarterial, intracerebral, intracerebellar, intrabronchial, intrathecal, topical, and aerosol route.

**Claim 40 (withdrawn):** The method of claim 33, wherein the disease or injury is selected from the group consisting of: cancer, colon cancer, breast cancer, inflammatory bowel disease, Crohn's disease, vascular disease, arthritis, ulcer, acute respiratory distress syndrome, ischemia-reperfusion injury, neurodegenerative disorders, autism, Parkinson's Disease, Alzheimer's Disease, gastrointestinal disease, tissue injury induced by inflammation, and tissue injury induced by an environmental toxin.